# THE NEW YEAR.

# CALIFORNIA STATE BOARD OF HEALTH.

## MONTHLY BULLETIN

Vol. 6 JANUARY, 1911. No. 7

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## REGULAR MEETINGS

The California State Board of Health meets regularly the first Saturday of each month, but the stated meetings of January, April, July, and October constitute the quarterly meetings required by law to be held at the Capitol of the State.

By courtesy of the University of California the Food and Drug Laboratory and the Hygienic Laboratory are located in University buildings at Berkeley, California.

**Address all communications to the**

**SECRETARY, Sacramento, California.**

# JANUARY BULLETIN.

**Editor's Note.**—The engineering number which the board plans to issue has been held over until the March number, but this opportunity is taken to publicly acknowledge the indebtedness of the board to Professor C. G. Hyde of the University of California, Mr. C. E. Grunsky, Professor Chas. D. Marx of Stanford University, and others who have generously arranged to contribute popular articles for the number. It is the purpose of the board to place before the citizens in non-technical language the trend of municipal sewage purification methods as viewed by these men of integrity and wide reputation among sanitary engineers.

## THE NEW YEAR.

By William F. Snow, Secretary.

In the majority of business offices in California, January marks the beginning of a new fiscal year and the careful consideration of new lines of progress. With the departments of State government, however, January first marks only the beginning of the—end of the last quarter of the biennial period over which their limited funds must be stretched. It marks, also, their opportunity to present to the legislature their various needs for the next two years. There are only two things certain—there will not be money enough to cover all the demands, and there will not be time enough to properly consider all the bills which the departments have presented.

The State Board of Health, among the others, is asking for increased appropriations and for the passage of a number of bills. Believing that it is the duty of each department to ask only for the amount of money which it needs at this time for carrying on work actually in hand, the Board of Health has made close estimates aggregating $150,000, for the next two years. This sum or such portion of it as the present legislature may find it can provide, will be spent along the lines of vital statistics, food and drug, hygienic laboratory and general administrative work, as outlined in the December Bulletin.

### COUNTY BOARD OF HEALTH BILL.

The Board has introduced two bills of special importance which should become law. The first one—Senate bill No. 182, Senator Black—provides for county boards of health and county sanitary inspectors. Under the provisions of the act, fifty freeholders, who are residents and taxpayers within a county, may institute the proceedings, which require the board of supervisors to appoint a sanitary inspector. This inspector must be appointed from a list of candidates who have been approved, after examination, by the State Board of Health. The county board of health provided by the act consists of the county health officer (chairman), the county recorder, the county district attorney, the county school superintendent, the county surveyor.

California cities are spending considerable sums of money on sanitary inspection of their milk, meat, and vegetable supplies. The larger cities have to send their inspectors into as many as *ten* or *fifteen* counties. These city inspectors have no authority outside their city limits, except to refuse permission to the producer to bring his product into the city for sale. This results in the smaller towns receiving the rejected products, and sometimes in secret contracts to handle condemned products through accredited dairies, etc. Neither the cities nor the counties are satisfactorily protected by this arrangement.

The cities construct at great expense sewers and water supplies, and then find their residents have no protection when they go into the mountains or country districts for their summer vacations. This is a phase of health protection which can not be provided by city inspectors, because the things sold—the country hotel accommodations and camp sites, etc.—are not brought to the city for marketing.

The great majority of physicians either do not have the time, or do not know how to properly investigate the source of spread of typhoid fever, and all the other communicable diseases. This often requires several days of following up clues, examining water supplies, dairies, sewage disposal arrangements, relations of patients to other citizens, etc.

In order to act intelligently the County Health Officer must have all this information accurately and promptly. He can only obtain this by having a trained inspector at his disposal, unless he is paid to devote his own time to the work. In the majority of instances quarantine and the stamping out of epidemics involves the closing of schools, or condemning of insanitary conditions. The county superintendent of schools and the county surveyor are in a position as members of the Board of Health, to be of service in aiding the health officer on one hand, and protecting the public from arbitrary rulings on the other.

The pure food and drug violations, and the violations of the food sanitation acts are now enforced by the county district attorneys, and all the vital statistics records (exclusive of the chartered cities) are collected by the county recorder.

These four elective county officials, together with the County Health Officer, as the direct representative of the county board of supervisors will constitute an impersonal Board of Health, each member of which by reason of his office, has something definite to contribute to the health administration of the county.

## AMENDMENTS TO STREAM POLLUTION LAWS.

The second important addition to public health laws which the State Board of Health is advocating, relates to the establishment of adequate machinery for the enforcement of the present rigid laws against pollution of streams. This is Assembly Bill No. 885, Assemblyman Rosendale. Under the law as it exists the State Board is practically helpless in its enforcement. The amendments proposed require all cities and towns now discharging sewage into any stream, whose waters are or may be used for human or animal consumption, to file plans of their sewage systems and such other data as may be specified. All cities and towns which desire in the future to discharge sewage or sewage-effluents into any such stream or water supply are required to file plans of their proposed systems. On compliance with these provisions of the law, the State Board of Health is required to make investigations upon which it bases action in granting or refusing permits. It is expected that if these amendments become law, they will have very far-reaching influence in reducing the needless loss of life and health now being caused by typhoid fever and other water-borne diseases.

## OTHER IMPORTANT HEALTH LEGISLATION.

In addition to these bills, the State Board of Health has introduced a number of important bills designed to make its administrative work more effective, and to cover points in the pure food and drug laws not now provided for.

The tuberculosis associations have introduced bills for a sanatorium; for the dissemination of knowledge of tuberculosis and a general investigation of its prevalence within the State; and for proper registration of all cases of tuberculosis and disinfection of premises occupied by such cases.

The school authorities have introduced bills providing for joint duties of the State Board of Health with the Board of Education, in exercising supervision over the contruction of school buildings and the establishing of minimum requirements for health examinations of school children.

From individual Assemblymen and Senators and from miscellaneous sources many other bills directly or indirectly relating to health conservation have been introduced. One bill provides for the sanitary control of oysters and shellfish; another bill provides for the abandonment of the common drinking cup after November 1, 1911; another good bill provides for the establishment of districts for the eradication of malaria-carrying mosquitoes; several measures relating to the control or eradication of prostitution are in committee and some effective legislation in this direction should result.

These and other legislative measures are under careful consideration and give promise of a most encouraging advance along health conservation lines during the next two years.

The State Board of Health joins in the general good wishes of the new year, but for its own particular part must continue on its impoverished way until July 1, 1911, when it may make New Year's plans in accordance with the duties and the funds with which it shall find itself provided by the present legislature. Citizens who have been interested in public health progress, and who have followed the work of the State Board of Health, can be of great service to the State at present by urging the passage of such bills now pending as appeal to them. The members of the State Board of Health, as well as the members of the legislature, realize that it is impossible to pass and adequately finance all the really good health measures presented. It is most desirable that the public indicate its opinion.

# THE NEED AND VALUE OF A SANITARY ENGINEERING LABORATORY IN STATE BOARD OF HEALTH WORK IN CALIFORNIA.

By CHARLES GILMAN HYDE, Sanitary and Hydraulic Engineer.*

Year by year the duties of State Boards of Health must be extended in order that many vital problems which are constantly arising or are gradually demanding recognition due to the increasing density of population, greater independence of communities, etc., may be successfully met. Progressive states are organizing departments of sanitary engineering to supplement, reinforce and render more effective the work of those already developed for the collection of vital statistics, the providing of aids to diagnosis, the study and control of epidemics of infectious disease, and the control of the quality of foods and drugs.

In the promotion and conservation of the public health the control of environments is a most important factor. In the control of environments the sanitary engineer has an extremely important field of usefulness. Many inter-community and specialized municipal problems of a sanitary nature demand that the State, through its Board of Health, furnish engineering advice and control. This has been done in Massachusetts, Ohio, Pennsylvania and New York with tremendous success—so much success in fact that other states are rapidly falling into line and it will be but the matter of a few years when that state whose Board of Health does not possess a well organized, efficient sanitary engineering department will be an exception rather than the rule.

The State of California, on the western frontier of the United States, with its own peculiar climatic conditions, must not only face and solve the many engineering problems met with elsewhere, but, in addition, those which are introduced by long seasons of dryness, intense summer heat, intermittent stream flow, etc.

Among the problems and duties which must be met in the immediate future by the State Board of Health of California, through a sanitary engineering department, are the following:

(1) The determination of the sanitary condition of the surface waters of the state.

(2) The examination of surface waters of the state with reference to their availability and logical use as sources of domestic and industrial water supply.

(3) The determination of the character and composition of the surface and ground waters of the State, especially those which are or can be used for public water supply purposes.

(4) The determination of the character and composition of sewages with particular reference to the problems of disposal.

(5) The conduct of experiments in water and sewage purification and treatment, of such a nature and to such an extent as these are made necessary by peculiar local conditions.

(6) The devising of laws and machinery for the proper control of the purity of inland waters of the State, and tidal waters in which shell fish are grown or taken.

(7) The giving of the general advice to cities and towns with respect

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to availability of methods of sewage and water purification and the necessary efficiency of works to meet the demands of local conditions.

(8) The review and approval of all plans for systems of water supply, water purification, sewerage and sewage disposal and, possibly, municipal refuse disposal, in order that correctness of design may be insured and efficiency of operation become possible.

(9) The controlling of malaria by the destruction of mosquitoes through the draining of marshes and other engineering operations.

(10) The undertaking of special investigations in which sanitary engineering problems of common interest are involved.

(11) The arbitration of community disputes involving the principles and problems of sanitary engineering.

All of this work is being pursued in certain states, especially those named above. A portion of the work is being performed in several other states.

At the present time in California almost all of our inland streams are being polluted to some extent. Certain streams are already grossly polluted.

The writer has had occasion elsewhere to call attention to the fact that "the rivers of California are of priceless value to the State and its people and should not be made to serve as sewers for the removal of the wastes of an ever-increasing population." A logical program of conservation should be worked out, one that shall recognize the various factors and conditions involved and which shall be sound when judged by economic, sanitary and æsthetic standards. Such work can best be done through a State Board of Health Engineering Department, with a corps of especially trained and experienced sanitary engineers.

Although a great many sewerage systems are in operation in California and a number of sewage treatment works has been installed, it is a significant and deplorable fact that in scarcely one instance has the character and composition of the sewage been determined or the sanitary efficiency of purification been investigated. This should be done. Small towns can not maintain laboratories and trained men for this work. The State Board of Health through a well-equipped, but not unduly expensive laboratory, could and should easily perform all of such work required in the State.

Moreover, it is not to be expected that the cities and towns in the State, in the absence of advisory authority, will in all cases realize the need of sewage or water purification or be able to determine what methods and processes might be best adapted to their needs. Such advisory work should be done by the State Board of Health through its engineering department. The department should not furnish plans or estimates of cost; these should be prepared by competent engineers employed by the municipalities in question.

The above are only a few of the many instances wherein the work of a sanitary engineering department would be a most effective adjunct to the operations of the State Board of Health. The eleven stated items of special usefulness of such department do not by any means comprehend the entire field. The discussion could be greatly lengthened and many examples cited to explain the scope and value and necessity for such work. Enough has been said, it is hoped, to clearly indicate the duty which the State must perform and which it seems not yet to have recognized.

In Massachusetts, where an efficient engineering department has been in operation for upward of twenty years, the results have been of immeasurable value to the state. The advantages are to be measured in terms of efficiency of water and sewage purification works, in terms of reduced death rate, in so far as this can be effected by engineering operations, and in æsthetic terms as related to the condition of the streams protected from gross contamination, etc.

The present legislature should make ample provision for such work in California. Sufficient funds should be set aside so that a sanitary engineering department may be effectively organized to operate in a progressive and thorough-going manner and not in a half-starved, half-provisioned way. If California should follow the example of Massachusetts and other states, granting ample funds for the conduct of this work, equivalent results could be vouchsafed. The value of the returns would be many times the expenditure.

## SELF-PURIFICATION OF STREAMS.

By Horace G. Griswold, Instructor in Civil Engineering, University of California.

Communities, like men, often follow false gods and are forced to learn truths through bitter experience. Such at least has been the case in many instances where a community has been too blind to profit by the experiences of its neighbors. When questions of public health and sanitation first came into prominence, many cities hastened to obtain adequate and pure supplies of water. The purity of these supplies in many cases was assumed on an erroneous theory.

Early in sanitary investigations it was noted that any polluting matter introduced into a stream disappeared during a longer or shorter run of the stream; chemical analyses, also, showed the disappearance of the organic matter at the downstream points. It was therefore concluded, but unfortunately with only half truth, that ''running water purifies itself.'' We know now, however, that it is not the velocity of the running of a stream but the amount of time consumed in the flowing of the stream from point to point that affects the degree of purification. For example, if we should consider two streams identical in every condition save that the first flowed with a velocity of one mile an hour and the second had a velocity of four miles an hour, other things being equal, it would be found that the second had only purified itself in a flow of four hundred miles as much as the first had in a flow of one hundred miles. That is, the ''age'' of the water was what had improved it, not the distance traveled or the speed with which it traveled. It was the custom among the old sailing skippers to use no water on board the ship that had not been around the world, *i. e.* had been properly aged.

The principal water supply pollutions that we fear are those containing pathogenic organisms, in other words, germs capable of producing disease. These organisms are warmth lovers and thrive in warm, comfortable places, with their food within easy reach such as they have been accustomed to in their life within the human body; introduce them into a water supply and they are subjected to all the dangers of an unfavorable environment. The factors which reduce the numbers of these bacteria in the water supply, either actually or relatively per unit of volume, are sunlight, aeration and oxidation, dilution, sedimentation, antagonistic organisms, and the natural life period of the bacteria themselves.

Let us follow the dangers from a particular group of typhoid bacilli as they are carried down a slow moving stream. As the bacteria enter the stream from the mouth of some sewer the first thing they have to contend with will be death dealing sunlight. A bacterium exposed for a time to the rays of the sun will lose all interest in life and curl up and die. But fortunately for them, the sun can not penetrate very far into the water with any force and only those few bacteria that are in the upper layers of the water have to pay the penalty. These bacterial travelers are subjected at all times to the attacks of antagonistic organisms which devour them by hundreds, still the loss from this cause is comparatively slight. If the stream in its wanderings is fed by pure springs or streams, the introduction of this pure supply tends to dilute the polluted water, separating the bacteria and lessening the number to be found in any particular volume,—a sort of purification, but a very inadequate and dangerous one. During the flow of the stream the particles of sediment are tending to separate out at every quiet reach and settling to the bottom. Under favorable conditions the sedimentation may be sufficient to entangle the bacteria among the particles and carry some of them to the bottom, where they are buried and die. A slight number of the bacteria may meet their death through the combined effects of æration and agitation but the chief benefit to the stream is the reduction of organic matter and the liberation of gases.

It must be remembered, however, that the great factor in the purification process is the passage of a sufficient interval of time to allow all unfavorable agents to act on the bacteria to the fullest extent. It must not be forgotten that these bacteria have been placed in a foreign and unfavorable element and that they will suffer accordingly. The weakest ones die first and in great numbers; they die because they can not live under the strain of the new conditions—new food, new drink, new climate and a new manner of life. As the bacteria do not multiply in these adverse conditions, more of the resistant ones die off till we have left only the hardiest of them. These may exist in the water for periods of over a month; experiments have shown that the typhoid bacillus will live in ice for a period of six months.

Suppose the dangers and unfavorable conditions of the journey have killed all but two per cent of the original number introduced. Has the stream purified itself to a point of safety? We may think of a ninety-eight or a ninety-nine per cent reduction as a large one, so indeed it is. Remember, however, that a single bowel discharge of a typhoid patient may contain from one hundred millions to ten billions of typhoid bacilli. The survivors under the above conditions might therefore number anywhere from one to two hundred millions. Assume an average stream flow even as low as a mile an hour and a length of life of a month for the ''resistent minority'' (as we call those bacteria successfully resisting the unfavorable conditions of life in the stream), we would have to have an unpolluted stream length of over seven hundred miles to reduce the infection received at any point to a degree of even doubtful safety. Are we safe in California?

In conclusion, it may be said that under natural conditions, rarely if ever found now, a stream would in time purify itself. Under our present conditions no stream which has been subjected to pollution by infectious material can so purify itself as to be safe for a water supply without the introduction of some purification process. The only exception to this is where the amount of infectious material introduced is infinitely small as compared to the normal stream flow volume.

## REVIEW OF THE YEAR'S PROGRESS OF CALIFORNIA IN SEWAGE DISPOSAL.

By N. D. Baker.

With the year of 1910 having passed, it is interesting to look over the State and note the progress our towns and cities have made in sanitary improvements.

According to the records on file at this office, (known to be incomplete), the following sewer systems and disposal plants have been completed and put into operation during the year:

| | | |
|---|---|---|
| Bishop | $3,975. | Sewage disposal tank. |
| Monterey | 4,750. | Septic tank. |
| Pasadena | 16,000. | Septic tank. |
| Santa Clara | 24,623. | Disposal plant and sewer extensions. |
| Whittier (bonds) | 110,000. | Sewer system and septic tank. |
| East San Jose | 29,900. | Sewer system and disposal plant. |
| Bakersfield | 14,500. | Septic tank. |
| Imperial | 33,346. | Sewer system and disposal plant. |
| Mayfield | 21,785. | Sewer system and disposal plant. |
| Lodi | 49,941. | Sewer system and disposal plant. |
| Los Banos | 28,639. | Sewer system and septic tanks. |
| Newman | 23,079. | Sewer system and septic tank. |
| San Anselmo (bonds) | 15,000. | Sewer system. |
| Colusa | 27,808. | Sewer system and septic tanks. |
| Corona | (figures not available). | Sewer system and septic tanks. |
| Total | $403,346. | |

Besides these improvements which were completed during 1910, the old year leaves us a legacy of a large number of sewer improvements for which money has already been provided by bond issue and which are now in course of construction or soon to be built. This list includes the following:

| | | |
|---|---|---|
| Brawley | $18,000. | Bonds for sewer system. |
| Colton | 52,307. | Sewer system nearing completion. |
| Corning | 22,000. | Bonds for sewer system and tanks. |
| Calexico | 35,000. | Bonds for sewer system. |
| Coronado Beach | 17,500. | Extensions to sewer system. |
| Modesto | 65,000. | Sewer system and septic tanks. |
| Monrovia | 120,000. | Sewer system, contract soon to be let. |
| Orange | 16,000. | Outfall sewer and septic tanks. |
| Oroville | 120,000. | Bonds for sewer system and tanks. |
| Pleasanton | 40,000. | Sewer system and disposal plant. |
| Roseville | 68,000. | Sewer system and disposal plant. |
| Santa Paula | 45,000. | Sewer system and disposal plant. |
| Tulare | 80,000. | Sewer system and septic tanks. |
| San Luis Obispo | 10,420. | Sewerage disposal plant. |
| Sonoma | 20,000. | Sewer system and septic tanks. |
| Turlock | 10,000. | For sewer extensions. |
| Fresno | 36,775. | Sewer system in Belmont Addition. |
| Porterville | 34,397. | Sewer extensions. |
| San Diego | 145,093. | Sewer extensions. |
| San Francisco | 260,000. | Sewer extensions. |
| Redwood City | 13,932. | Sewer extensions. |
| Alameda | 44,800. | Sewer extensions. |
| Pasadena | 22,518. | Sewer extensions. |
| Petaluma (about) | 10,000. | Sewer extensions. |
| San Mateo | 24,000. | Sewer extensions. |
| Oakland | 15,485. | Sewer extensions. |
| Other sewer | 43,407. | Extensions on record (very incomplete). |
| Total | $1,389,634. | Authorized and now being used for sewers and sewer extensions. |

It will be seen then that the total expenditure during the year, including systems completed and systems begun, amounts to more than $1,792,980 for sewers and sewage disposal.

In addition to the communities that have already taken the necessary steps for securing better sanitary conditions by providing sewerage facilities, the following represents those that have such improvements under advisement at the beginning of the new year. No doubt a large proportion of these will build sewer systems or provide the money for them during the coming year.

Anaheim, election for sewer bonds called;
Biggs, engineer's preliminary estimates for sewer system being considered with view to holding bond election;
Coalinga, bond election called for sewer system;
Concord, engineer's estimates asked with view to holding bond election for sewer system;
Covina, bond election for sewers just defeated but another one to be held in near future;
Etna Mills, bond election to be held for sewer system;
Fowler, movement on foot to ask for bond election for sewer system;
Fortuna, bond election for sewer system to be held;
Glendale, question of providing sewer system being agitated;
Hanford, bond election called to provide for revision of sewer system and building of septic tanks;
Healdsburg, to ask for bond election for sewer system;
Huntington Beach, bond election for sewer system proposed;
Lemoore, bond election called for sewer system and tanks;
Lindsay, movement on foot to call sewer bond election;
Los Gatos, sewer improvements to be made;
Maricopa, proposed to raise money for sewer system;
Merced, proposed to build septic tank or other disposal works;
Montague, complete sewer system proposed;
Petaluma, some system of sewage disposal is proposed;
Rio Vista, it is proposed to take up the question of sewer system;
Sawtelle, bond election will be called for sewer system;
South San Francisco, bond election proposed for sewer system;
Winters, a bond election will soon be called for sewer system;
Orland, it is proposed to bond the town for a sewer system;
Sisson, plans being drawn for sewer system;
Eureka, planning outfall sewer to cost $15,000;
Madera, there is talk of installing a septic tank on the sewer-farm.

What is the significance of all this activity along sanitary lines? Why do these towns spend the money for sewer systems?

One answer is that they do it because it is good business. California is a young country, and in many of the smaller towns the future prosperity depends in large measure on the new people who will come there to live.

This is a period of colonization; everywhere over the State the chambers of commerce and other organizations are setting forth to the public the attractive features of their own communities, and endeavoring to stimulate the coming of people from the eastern states.

It is also true that everywhere there is a tendency toward better and more comfortable ways of living. People are more and more demanding to have sanitary conveniences in their homes. Conveniences that two generations ago were considered luxuries to be afforded only by the very rich, are now considered among the necessities of life by the moderately well-to-do. It is as hard, nowadays, to get desirable citizens to come and live in a town without sewers, as it would be to induce them to live in a house without a bath-tub.

So the small communities of the State are recognizing this demand by making provision for sanitary improvement. If for no other reason, "it is good business."

Another significant and hopeful feature is the building of sewage disposal plants. Several of these, representing the latest approved methods of sewage purification, will be described in the March Bulletin. Such progress indicates that the public conscience is being awakened to such an extent that sums of money can be voted to build works for the protection of our streams. The purity of our surface water supplies is a natural resource of such value that it must not be overlooked.

That such works have been built by California towns gives us a precedent. We should urge others to be built until the streams of the State shall be reclaimed from their present state of pollution, and preserved in the purity that was intended to be theirs.

## EDITORIAL COMMENT.

### A CITY HELD RESPONSIBLE FOR SPREADING TYPHOID FEVER.

Some months ago the Bulletin stated it believed the time would come when city governments or corporations could be prosecuted by individuals who contracted typhoid fever as the result of a contaminated water supply. This statement was guarded by saying that public interest in sanitation was so great and the advances made in the education of the people so many, that such a course was not beyond the range of probability. The remark has been repeated from time to time in lectures that have been given under the auspices of the Bureau of Public Health Information, in order to strongly emphasize the infectious character of typhoid fever and the chief way in which the disease was contracted. The California State Board of Health has hardly expected that this point would be so soon decided by the Supreme Court of one of our great states.

In an opinion filed on December 23, 1910, in the cases of Delia Keever and Kate Flanagan, against the city of Mankato, the Supreme Court of Minnesota holds that this municipality was liable for its negligence in its private or corporate capacity, if it negligently allowed the water supply in its waterworks system to become polluted, thus causing deaths from typhoid fever. It is alleged in the complaint that the defendant, a municipal corporation, allowed its water supply to become polluted with large quantities of filth and sewage, thus making the water dangerous to life and health, and that the plaintiff, a citizen and resident of Mankato, by using the water contracted typhoid fever and died from that disease. The city demurred to the complaint and its demurrer was sustained, but the order sustaining the demurrer has just been reversed by the Supreme Court. The Supreme Court further states that it is not a question as to whether the city failed to provide an adequate supply of pure water, but the question here is, whether the city was liable because of recklessly causing dangerous substances like common sewage and other filth to saturate its water supply.

The court also held that the city was liable for its negligence in its private or corporate capacity, and was not exempt because of carrying out a governmental function. It was insisted by the defendant that the city could make no profit out of its operation of the waterworks. The court, while not doubting the truth of this statement, holds that this does not argue that the city should be exempted from all liability for mismanagement.

The defendant also argued that it would not be sound policy to permit such actions against the city, as the city might be bankrupted thereby. The court held that the question was one of general principles recognized by law. One portion of the decision is especially interesting and is well worth quoting verbatim: "It is obvious that a sound public policy holds a city to a high degree of faithfulness in providing an adequate supply of water. Nor does it appear why the citizens should be deprived of the stimulating effects of the fear of liability on the energy and care of its officials; nor why a city should be exempt from liability while a private corporation under the same circumstances should be held responsible for its conduct and made to contribute to the innocent persons it may have damaged."

Similar suits are now pending in Rutland, Vermont, and Rochester, New York, and the effects of the Minnesota decision are awaited with great interest. It must be remembered that this important decision of the Supreme Court of Minnesota is based entirely on modern medical science and public health teachings. The effects of this decision, the first of its kind, will be far-reaching. To make a city liable for deaths from typhoid fever, due to a contaminated water supply, may seem to many unique, and yet it simply marks the general trend of the public's interest in health conservation. Directors of city and municipal water supplies will read this decision with more than passing interest.

In California one similar case is at present in the county courts, claiming $10,000 damages for death due to water-borne infection with typhoid fever.

### TEACHING TUBERCULOSIS DANGERS.

During the early winter months throughout the United States twenty thousand large posters will be displayed on billboards by the National Association for the Study and Prevention of Tuberculosis. The cost of this work is estimated at $100,000, but the tuberculosis association is not footing the bill. The National Bill Posters' Association has donated free space upon their billboards, and the Poster Printers' Association has supplied the printing, while nine paper manufacturers have donated the paper required. In forty-six different cities nearly three thousand posters have already been hung, and it is planned to distribute over twenty thousand before April first in more than four hundred cities and towns. These posters will be sent free of charge to any tuberculosis society who will pay the necessary transportation, and as many will be forwarded as are required to cover the billboards in its territory.

The posters show very graphically how fresh air, good food and rest will cure tuberculosis; the dangers of inhaling bad air, the harm which results from closed windows, and the direct menace of the careless consumptive who scatters his tuberculosis germs about streets and public buildings by promiscuous spitting.

Perhaps there is no better way of impressing these facts upon the great body of the general public than the billboards, and the many dollars which have been contributed toward this work speaks volumes for the interest which commercial organizations are taking in the subject. The billboard idea could well be utilized in the promotion of public health work outside of tuberculosis. The tuberculosis campaign has been waged with such assiduity that it has convinced the most skeptical. It only remains to enlarge upon this work, to make it of distinct value to other branches of the public health movement.

### HOOKWORM IN CALIFORNIA.

The work of Dr. Herbert Gunn for the California State Board of Health in investigating hookworm disease in certain mines in California, has been extensively commented on throughout the United States. "The Journal of the American Medical Association" devotes a two-column editorial to Dr. Gunn's report which was recently published in this Bulletin.

This journal also comments on the fact that in 1902 Wainwright and Nicholas examined four hundred anthracite miners selected from fifteen different mines of Pennsylvania, and found but one case of the infection. Dr. Gunn estimates that in the mines which he examined there are fifty to eighty per cent of the miners afflicted with hookworm disease. That the disease is general in the mines of California seems quite probable, and it would be very strange, in view of the excellent conditions which mines afford for the propagation of this disease, if many others throughout the country were not found infected. The hookworm problem is worthy of the earnest consideration of every citizen. The great strides which have been made within the past year in eradicating this pest are most commendatory, but the disease is not confined to the poor whites of the South; we, in our own State, have a problem before us which is of great import.

### THE SANITARY PRIVY.

The articles on a sanitary privy which appeared in the July and November numbers of this Bulletin have aroused much interest. Directions for building a sanitary privy have been issued in pamphlet form by the California State Board of Health and can be had from the secretary's office on request.

Statistics recently published show that in a census of over four thousand eight hundred American farms less than half of them are provided with a privy of any kind; such a condition of affairs is certainly lamentable and emphasizes the fact that while we are making great progress in the sanitation of cities and towns, little or nothing is being done in the country districts of many of our states. The California legislature is now considering important bills for the improvement of rural sanitation and the establishment of county sanitary inspection.

### THE CANCER PROBLEM.

Public interest in the cancer problem is rapidly increasing, and it is not too much to predict that a campaign against this dread disease will, be made which will be as broad in its scope, and we trust as remarkable in its results, as the world-wide campaign which is now being waged against tuberculosis.

The George Crocker research fund of the College of Physicians and Surgeons of New York is paving the way for the facts concerning cancer which are so necessary to intelligently combat it. In Germany other funds are being used for this purpose and already a large amount of material of great interest, has been collected. Levin, of New York, has recently been investigating cancer among American Indians. It has been known for some time that this disease was not common among the red men; it is also not as common among negrœs as among whites. It is said that in general, cancer is not as frequent among dark skinned races, and in Ceylon, only two hundred and thirty-four cases were reported in one year in a population of neary four million, a ratio of but six cases in one hundred thousand, while the ratio in European countries is from seventy to one hundred cases per one hundred thousand inhabitants.

It has been possible to gather careful records of the disease among the Indians by means of the Indian field service. Reports furnished by one hundred and seven out of one hundred and thirty physicians of this service show but twenty-nine cases of cancer in a population of over one hundred and fifteen thousand during a various experience of practice of these men ranging up to twenty years. These Indians are distributed over the United States, so cancer cannot be considered as a local disease, or peculiar to any portion of the country, *i. e.*, it is unaffected by climate or conditions of soil and moisture.

Cancer is said to be far less common among the Chinese than among Caucasian races. Dogs are peculiarly susceptible to cancer, and whether they contract the disease because of their close proximity to man, is an unsettled point. It has been stated authoritatively that cancer is more frequently the cause of death among dogs than it is in man. Thus are we confronted in the cancer problem by many things which are apparently contradictory. It is only by the collection of statistics and the constant search for the truth, that we can in any way, hope to cope successfully with this terrible disease.

# DEPARTMENT REPORTS.

## REPORT OF BUREAU OF VITAL STATISTICS FOR DECEMBER.

George D. Leslie, Statistician.

*Marriages.*—The marriages reported for December number 2,405, as compared with 2,189 for the same month last year. For an estimated mid-year population of 2,396,639 in 1910, the December total represents an annual rate of 11.8 per 1,000 inhabitants, against 11.6 for November.

The monthly totals were highest for the following counties: San Francisco, 477; Los Angeles, 461; Alameda, 210; Fresno, 100; Sacramento, 94; Marin, 91; Santa Clara, 87; Orange, 84, and San Diego, 74.

The aggregate for San Francisco and the other bay counties (Alameda, Contra Costa, Marin, and San Mateo) was 832.

*Births.*—For December there were reported 2,842 living births, representing an annual birth rate of 14.0 per 1,000 population, as compared with 13.0 for the preceding month. The corresponding total for the same month the year before was 3,011.

The totals were highest for the following counties: Los Angeles, 671; San Francisco, 514; Alameda, 292; Fresno, 93; Santa Clara, 90; Sacramento, 90; San Diego, 69; San Bernardino, 63; Santa Barbara, 68; Butte, 62; San Joaquin, 60, and Riverside, 58.

Altogether 1,770 births were registered in the twenty-six freeholders' charter cities, the leading cities being as follows: San Francisco, 514; Los Angeles, 473; Oakland, 187; Sacramento, 73; San Diego, 59; Berkeley, 58; Santa Barbara, 50; Pasadena, 39; Fresno and Stockton, each 37; San Jose, 32; Alameda and Long Beach, each 29; San Bernardino, 26, and Riverside, 25.

The aggregate for San Francisco and the transbay cities (Alameda, Berkeley, and Oakland) was 788, and for San Francisco and the other bay counties was 886. Similarly, the total for Los Angeles and neighboring chartered cities (Long Beach, Pasadena, and Santa Monica) was 548, and for the entire county was 671.

*Deaths*:—Exclusive of stillbirths, altogether 3,136 deaths were reported for December, this number including 282 delayed certificates for deaths in November and earlier months. The 3,136 deaths give an annual death rate of 15.4, against 13.5 for the preceding month. The corresponding total for the same month last year was 2,980.

The December totals were highest for the following counties: Los Angeles, 761; San Francisco, 530; Alameda, 279; Sacramento, 114; Santa Clara, 111; San Joaquin, 91; Fresno, 89; San Diego, 87; San Bernardino, 84; Sonoma, 65; Orange, 62; and Santa Barbara, 58.

There were altogether 1,756 deaths in the twenty-six chartered cities, the highest totals being as follows: San Francisco, 530; Los Angeles, 473; Oakland, 154; Sacramento, 75; San Diego, 74; Pasadena, 58; Stockton, 57; Santa Barbara, 42; San Jose, 37; Berkeley, 34; Alameda, 32, and Fresno, 31.

The aggregate for the urban district (San Francisco and the transbay cities) was 750, and for the entire metropolitan area (San Francisco and the other bay counties) was 879. Similiarly, the total for Los Angeles and neighboring chartered cities was 565, and for the whole county was 761.

*Causes of Death.*—The following table shows the distribution of deaths in California for the current month, in comparison with the preceding month:

*Deaths from Certain Principal Causes, with Proportion per 1,000 Total Deaths for Current and Preceding Month, for California: December.*

| Cause of Death. | Deaths: December. | Proportion per 1,000. December. | Proportion per 1,000. November. |
|---|---|---|---|
| **All Causes** | 3,136 | 1,000.0 | 1,000.0 |
| Typhoid fever | 43 | 13.7 | 16.5 |
| Malarial fever | 10 | 3.2 | 3.8 |
| Measles | 4 | 1.3 | 1.1 |
| Scarlet fever | 9 | 2.9 | 1.5 |
| Whooping-cough | 10 | 3.2 | 3.8 |
| Diphtheria and croup | 26 | 8.3 | 8.3 |
| Influenza | 14 | 4.5 | 1.5 |
| Other epidemic diseases | 21 | 6.7 | 7.1 |
| Tuberculosis of lungs | 389 | 124.0 | 125.2 |
| Tuberculosis of other organs | 63 | 20.1 | 18.8 |
| Cancer | 181 | 57.7 | 65.8 |
| Other general diseases | 127 | 40.5 | 36.8 |
| Meningitis | 27 | 8.6 | 9.4 |
| Other diseases of nervous system | 273 | 87.0 | 92.9 |
| Diseases of circulatory system | 522 | 166.4 | 148.5 |
| Pneumonia and broncho-pneumonia | 321 | 102.4 | 75.2 |
| Other diseases of respiratory system | 79 | 25.2 | 25.9 |
| Diarrhea and enteritis, under 2 years | 100 | 31.9 | 34.2 |
| Diarrhea and enteritis, 2 years and over | 32 | 10.2 | 9.8 |
| Other diseases of digestive system | 143 | 45.6 | 48.1 |
| Bright's disease and nephritis | 190 | 60.6 | 68.8 |
| Childbirth | 30 | 9.6 | 10.9 |
| Diseases of early infancy | 100 | 31.9 | 38.3 |
| Suicide | 58 | 18.5 | 21.1 |
| Other violence | 207 | 66.0 | 77.1 |
| All other causes | 157 | 50.0 | 49.6 |

For December there were reported 522 deaths, or 16.6 per cent of all, from diseases of the circulatory system, and 452, or 14.4 per cent, from various forms of tuberculosis, heart disease thus leading tuberculosis considerably.

Other notable causes of death in December were: Diseases of the respiratory system, 400; diseases of the nervous system, 300; diseases of the digestive system, 275; violence, 265; Bright's disease and nephritis, 190; cancer, 181, and epidemic diseases, 137.

The deaths from epidemic diseases were as follows: Typhoid fever, 43; diphtheria and croup, 26; influenza, 14; malarial fever and whooping-cough, each 10; and all other epidemic diseases, 34. Typhoid fever was the leading epidemic disease for December, as for the preceding six months.

The deaths from the three leading epidemic diseases reported for December were distributed by counties as follows:

| TYPHOID FEVER. | |
|---|---|
| Alameda | 4 |
| Colusa | 1 |
| Fresno | 5 |
| Kern | 1 |
| Kings | 1 |
| Los Angeles | 6 |
| Madera | 1 |
| Mendocino | 1 |
| Merced | 1 |
| Placer | 1 |
| Plumas | 1 |
| Riverside | 2 |
| Sacramento | 2 |
| San Bernardino | 3 |
| San Francisco | 2 |
| San Luis Obispo | 1 |
| Santa Barbara | 2 |
| Santa Clara | 1 |
| Shasta | 1 |
| Solano | 1 |
| Sonoma | 2 |
| Tuolumne | 2 |
| Ventura | 1 |
| Total | 43 |

| DIPHTHERIA AND CROUP. | |
|---|---|
| Alameda | 3 |
| Fresno | 5 |
| Los Angeles | 7 |
| Mendocino | 2 |
| Riverside | 1 |
| San Bernardino | 1 |
| San Francisco | 2 |
| Santa Barbara | 1 |
| Shasta | 1 |
| Solano | 1 |
| Stanislaus | 1 |
| Yuba | 1 |
| Total | 26 |

| INFLUENZA. | |
|---|---|
| Alameda | 1 |
| Fresno | 2 |
| Kern | 1 |
| Lake | 1 |
| Los Angeles | 2 |
| Orange | 1 |
| San Diego | 1 |
| Santa Clara | 1 |
| Santa Cruz | 1 |
| Tehama | 1 |
| Tulare | 1 |
| Ventura | 1 |
| Total | 14 |

*Geographic Divisions.*—Data for geographic divisions, including the metropolitan area, or "Greater San Francisco," are as follows:

*Deaths from Main Classes of Diseases, for Geographic Divisions: December.*

| Geographic Division. | DEATHS: DECEMBER. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | All Causes | Epidemic Diseases | Tuberculosis (All Forms) | Cancer | Diseases of Nervous System | Diseases of Circulatory System | Diseases of Respiratory System | Diseases of Digestive System | Bright's Disease and Nephritis | Violence | All Other Causes |
| THE STATE | 3,136 | 137 | 452 | 181 | 300 | 522 | 400 | 275 | 190 | 265 | 414 |
| *Northern California* | 363 | 23 | 37 | 19 | 38 | 66 | 52 | 24 | 20 | 33 | 51 |
| Coast counties | 170 | 9 | 23 | 14 | 22 | 25 | 25 | 11 | 9 | 10 | 22 |
| Interior counties | 193 | 14 | 14 | 6 | 16 | 41 | 27 | 13 | 11 | 23 | 29 |
| *Central California* | 1,644 | 69 | 202 | 85 | 155 | 298 | 233 | 146 | 102 | 140 | 214 |
| San Francisco | 530 | 9 | 73 | 31 | 44 | 109 | 64 | 50 | 40 | 40 | 70 |
| Other bay counties | 349 | 13 | 42 | 22 | 33 | 69 | 55 | 24 | 24 | 23 | 44 |
| Coast counties | 199 | 7 | 25 | 14 | 26 | 39 | 29 | 15 | 7 | 21 | 16 |
| Interior counties | 566 | 40 | 62 | 18 | 52 | 81 | 85 | 57 | 31 | 56 | 84 |
| *Southern California* | 1,129 | 45 | 213 | 77 | 107 | 158 | 115 | 105 | 68 | 92 | 149 |
| Los Angeles | 761 | 27 | 138 | 60 | 74 | 111 | 76 | 66 | 49 | 56 | 104 |
| Other counties | 368 | 18 | 75 | 17 | 33 | 47 | 39 | 39 | 19 | 36 | 45 |
| *Northern and Central California* | 2,007 | 92 | 239 | 104 | 193 | 364 | 285 | 170 | 122 | 173 | 265 |
| Metropolitan area | 879 | 22 | 115 | 53 | 77 | 178 | 119 | 74 | 64 | 63 | 114 |
| Rural counties | 1,128 | 70 | 124 | 51 | 116 | 186 | 166 | 96 | 58 | 110 | 151 |

# REPORT OF PURE FOOD AND DRUG LABORATORY FOR DECEMBER, 1910.

PROFESSOR M. E. JAFFA, Director.

The work of the laboratory for the past month has been devoted to the routine examinations of drugs and foods. Upwards of fifty samples of drugs of various kinds have been examined, and considerable number of violations discovered.

The foods and food products analyzed and examined were of a miscellaneous character, including eggs, flavoring extracts, confectionery, vinegar, beverages, pickles, ice cream, jellies, syrups, honeys, waters and also the examination of a number of colors to ascertain whether or not they belonged to the permissible class.

No food inspection decisions were received at the laboratory since the publication of the last Bulletin.

The following violations were referred for prosecution during the month:

| Certificate No. | Material. | Violation. | Name of Dealer. | Locality. |
|---|---|---|---|---|
| 1123 | Headache tablets, Dr. Haywood's | Acetanilid. Mislabeled | Railroad Pharmacy | San Francisco |
| 1124 | Horehound & tar, Hale's honey | Mislabeled. Ethyl alcohol | F. B. Elwood | Alhambra |
| 1125 | Dr. Bosanko's cough and lung syrup | Mislabeled. Morphine, chloroform, ethyl alcohol | Lang & Deville Co. | Los Angeles |
| 1126 | Dr. Seth Arnold's cough killer | Mislabeled. Ethyl alcohol, morphine and chloroform | Gardena Pharmacy | Gardena |
| 1127 | S. S. Cough cure | Mislabeled. Ethyl alcohol, morphine and chloroform | S. M. Smith | Moneta |
| 1128 | Sweet spts. nitre | Mislabeled. Ethyl nitrite, ethyl alcohol | Alta Drug Co. | San Francisco |
| 1129 | Sweet spts. nitre | Mislabeled. Ethyl alcohol, ethyl nitrite | Salters Pharmacy | San Francisco |
| 1130 | Tincture arnica | Mislabeled. Ethyl alcohol | Weaver's Pharmacy | San Francisco |
| 1131 | Tincture myrrh | Mislabeled. Ethyl alcohol | Leon di Nola Co. | San Francisco |
| 1132 | Tincture myrrh | Mislabeled. Ethyl alco hol | Argonaut Drug Co. | San Francisco |
| 1133 | Laxative quinine | Mislabeled. Acetanilid | Brady-McLeod Drug Co. | Ocean Park |
| 1134 | Arom. spts. ammonia | Mislabeled. Ethyl alcohol | Brady-McLeod Drug Co. | Ocean Park |

**Laboratory Examinations and Analysis**—*Continued.*

| Certificate No. | Material. | Violation. | Name of Dealer. | Locality. |
|---|---|---|---|---|
| 1135 | Blackberry Carminative | Mislabeled. Ethyl alcohol | Hughes' Pharmacy | Los Angeles |
| 1136 | Miners' anti-pain pills | Mislabeled. Acetphenetidine | Logan Drug Co. | Los Angeles |
| 1137 | Headache powders | Mislabeled. Acetanilid | De Turks Pharmacy | San Francisco |
| 1138 | Headache wafers | Mislabeled. Acetanilid | Shumates Pharmacy | San Francisco |
| 1140 | Headache wafers | Mislabeled. Acetanilid | Sun Drug Co. | San Francisco |
| 1141 | Headache powders | Mislabeled. Acetanilid | Weaver's Pharmacy | San Francisco |
| 1143 | Headache powders | Mislabeled. Acetanilid | Penn Drug Co. | San Francisco |
| 1144 | Headache powders | Mislabeled. Acetanilid | World Drug Co. | San Francisco |
| 1146 | Foley kidney cure | Mislabeled. Ethyl alcohol | Owl Drug Co. | San Francisco |
| 1147 | Essence pepsin | Mislabeled. Ethyl alcohol | E. S. Castle | Los Angeles |
| 1148 | Precip. sulphur | Adulterated. Precipitated sulphur—48% residue | B. & S. Drug Shop | San Francisco |
| 1149 | Precip. sulphur | Adulterated. 58% residue after ignition | Coffin, Redington & Co. | San Francisco |
| 1150 | Precip. sulphur | Adulterated. 55% residue after ignition | Coffin, Redington & Co. | San Francisco |
| 1151 | Wynkoops Iceland pectoral | Mislabeled. Ethyl alcohol, morphine | D. C. Hazelrigg | San Diego |
| 1152 | For-a-cold cure | Mislabeled. False statements | Fremont Pharmacy | Los Angeles |
| 1153 | Laxative cure | Mislabeled. Acetanilid | Chambers' Drug Co. | Los Angeles |
| 1154 | Cough cure red seal | Mislabeled. Chloroform, ethyl alcohol, morphine | Shumates Pharmacy | San Francisco |

## NOTICES OF JUDGMENTS.

The following notices of judgments have been received at the Laboratory since the publication of the last monthly bulletin. Full notices may be obtained by addressing the Director of the State Food and Drug Laboratory, Berkeley, Cal.:

*Notice of Judgment No. 649.*—Adulteration of Olives. Product consisted in whole or in part of filthy, decomposed and putrid vegetable substance.

*Notice of Judgment No. 650.*—Adulteration and Misbranding of "No. 3 White Oats." Product had been mixed with quantity of wheat, barley and other seeds, stems, hulls, chaff, etc., which were substituted in part for the said oats.

*Notice of Judgment Nos. 704-705-651.*—Misbranding of Cheese. Said boxes contained numbers which were supposed and understood to designate the net weight in pounds, whereas in truth and in fact the cheeses were each 1 pound less in weight than indicated.

*Notice of Judgment No. 652.*—Misbranding of Egg Macaroni and Egg Noodles. Label indicated that egg, or product of the egg, was a principal ingredient of said articles of food, when in truth and in fact said articles of food contained little or no egg material.

*Notice of Judgment Nos. 653-678-679-681-685-687-688-690.*—Adulteration and Misbranding of Vinegar. Product consisted mainly of dilute solution of acetic acid and artificial coloring matter; substances had been substituted in part for apple cider; vinegar; a mixture of distilled vinegar and a product high in reducing sugars had been mixed so as to injuriously affect its quality and strength.

*Notice of Judgment No. 654.*—Misbranding of Olive Oil. Said label indicated that the contents of said can were pure olive oil, whereas, in truth and in fact they consisted almost wholly of cotton-seed oil; and label also indicated the contents of said can to be a foreign product, to wit, of the Kingdom of Italy, whereas, in truth and in fact, the contents were in large part manufactured in the United States of America.

*Notice of Judgment No. 655.*—Misbranding of Pepper. Product false and misleading in that the same contained ground olive pits or almond shells.

*Notice of Judgment No. 656.*—Adulteration and Misbranding of Calcium Acid Phosphate. Barrels were labeled "C. A. P.," which would lead the purchaser to believe that said barrels contained calcium acid phosphate, whereas, in truth and in fact, it was not calcium acid phosphate.

*Notice of Judgment No. 657.*—Adulteration of "Crystal Eggs." Product contained an added poisonous and deleterious ingredient, to wit, a boric acid product, which rendered said article of food injurious to health.

*Notice of Judgment No. 658.*—Adulteration of Macaroni. The products contained martius yellow, a poisonous color, which rendered the said articles of food injurious to health. The court issued a decree of condemnation and destruction.

*Notice of Judgment No. 659.*—Adulteration and Misbranding of Vanilla Flavoring Powders. A substance, to wit, artificial vanillin had been substituted wholly or in part for vanilla and tonka bean powder; whereas the package bore statements indicating the article of food was absolutely pure, high-grade vanilla and tonka bean powder.

*Notice of Judgment No. 660.*—Adulteration and Misbranding of Lemon Flavoring. An imitation lemon flavor, containing no oil of lemon, and containing a dye known as naphthol yellow S had been substituted in part for the article.

*Notice of Judgment No. 661.*—Adulteration and Misbranding of Orange and Lemon Flavoring Extracts. Product was labeled "Extract Lemon Bakers, Soluble Terpeneless Citral," whereas it consisted of a highly dilute terpeneless extract of lemon, containing only 0.04 per cent of citral and practically no oil of lemon.

*Notice of Judgment No. 662.*—Adulteration and Misbranding of Lemon Flavor and Vanilla Flavor. A substance consisting of 0.08 per cent of citral, and an artificial coloring matter, known as napthol yellow S had been substituted wholly or in part for the lemon extract, thereby reducing and affecting its quality and strength.

*Notice of Judgment No. 663.*—Adulteration and Misbranding of Vanilla Extract Vanillin and carmel had been substituted wholly or in part for the article.

*Notice of Judgment Nos. 664-666.*—Adulteration of Fish. Product consisted of filthy and putrid animal substance, unfit for human consumption.

*Notice of Judgment Nos. 665-675-682.*—Adulteration of Desiccated Eggs and Egg Product. Egg product contained excessive number of bacterial organisms of which a great many were of a gas-producing type. Product consisted of putrid, decomposed substance.

*Notice of Judgment No. 667.*—Misbranding of Molasses. Cans did not contain full quart of molasses.

*Notice of Judgment Nos. 668, 669, 672.*—Adulteration of Ice Cream Cones and Ice Cream Clams. Boric acid had been mixed with and added to each of them so as to reduce and lower and injuriously affect their quality and strength.

*Notice of Judgment No. 670.*—Adulteration of Catsup. Product consisted in whole or in part of a filthy, decomposed, and putrid vegetable substance.

*Notice of Judgment No. 671.*—Adulteration of Canned Tomatoes. Product consisted in whole or in part of a filthy, decomposed and putrid vegetable substance.

Notice of Judgment Nos. *673, 674, 680.*—Adulteration of Milk. Butterfat had been in part abstracted therefrom; and water had been substituted in part for milk.

*Notice of Judgment No. 675*—Misbranding and Adulteration of Eggs. Label contained words "pure and wholesome," but consisted wholly or in part of a filthy, decomposed, and putrid animal substance.

*Notice of Judgment No. 677*—Misbranding of Coffee. Label conveyed the impression that the product was composed of Mocha and Java coffee, whereas in truth and in fact said product was a blend of South American and Dutch East Indian Coffees.

*Notice of Judgment No. 683*—Adulteration and Misbranding of Brandy. Imitation brandy had been mixed with said article of food so as to reduce, lower and affect its quality and strength.

*Notice of Judgment No. 684, 689*—Misbranding of Lemon Flavoring. Label would lead purchaser to believe that the product consisted of pure lemon oil, when as a matter of fact nearly 80 per cent of said product was sesame.

*Notice of Judgment No. 686*—Adulteration and Misbranding of "Yando Egg Noodles." Product was colored with a dye of the tartarazine group, labeled "Yando Egg Noodles," when it did not contain sufficient egg to justify the use of the word "egg."

*Notice of Judgment No. 691*—Misbranding of Stock Feed. Label and tag bore statement that product was a food when in truth it was not a food but a mixture of feed and charcoal, also contained large percentage of weed seeds and screenings.

*Notice of Judgment No. 693, 694*—Misbranding of a Drug Product. (Alleged Drug-Habit Cure.) Each bottle contained morphine and alcohol and the label thereon failed to bear either a statement of the quantity or proportion of morphine or alcohol contained therein.

*Notice of Judgment No. 695*—Adulteration of Canned Pineapples. Product consisted in whole or in part of a filthy, decomposed, and putrid vegetable substance.

*Notice of Judgment No. 696*—Adulteration of "Frou Frou" Biscuits. Product contained an added poisonous ingredient, to wit, boric acid or compounds thereof.

*Notice of Judgment No. 699*—Adulteration and Misbranding of Corn Syrup and Sorghum Compound. Product contained 65-8 per cent of commercial glucose or corn syrup, whereas the label upon said can declared that it was a compound containing 50 per cent of corn syrup.

*Notice of Judgment No. 701*—Adulteration and Misbranding of Blackberry Preserves. Loganberry preserves had been substituted for the article described and the product consisted in part of a filthy, decomposed, and putrid, vegetable substance.

*Notice of Judgment No. 702*—Adulteration and Misbranding of Apple Butter. Product contained 6.13 per cent glucose, which had been mixed and packed with the product so as to reduce, lower, and injuriously affect its quality.

*Notice of Judgment No. 703*—Adulteration and Misbranding of Preserves. (Columbia Brand Compound Glucose Preserves.) Said product contained 69 per cent of glucose, whereas the label thereon stated that it was a compound containing 43 per cent of glucose, etc.

*Notice of Judgment No. 707*—Misbranding of a Drug Product. (Break-up-the-Grip Tablets.) False and misleading statements as to curative power, etc.

*Notice of Judgment No. 708*—Misbranding of a Drug Product. (Stanley's Instant Headache Cure.) False and misleading statements as to curative powers, etc.

*Notice of Judgment No. 709*—Misbranding of a Drug Product. (Sherman's Headache Cure.) False and misleading statements.

## REPORT OF THE STATE HYGIENIC LABORATORY FOR DECEMBER.

W. A. SAWYER, M.D., Director.

The present educational campaign against syphilis and gonorrhœa has indicated the necessity for reliable statistics based upon careful laboratory diagnosis. One result of the movement has been the timely resolution of the State Board of Health making these diseases reportable. The laboratories will further the good work by examining smears of dried pus for the gonococcus when the specimens have been properly prepared by physicians and sent in legal mailing outfits.

**Summary of Examinations made in the California State Hygienic Laboratory during the month of December, 1910.**

| Main Laboratory at Berkeley:<br>Condition suspected: | Positive. | Negative. | Total. |
|---|---|---|---|
| Diphtheria | 27 | 95 | 122 |
| Malaria | -- | 1 | 1 |
| Rabies | -- | 2 | 2 |
| Tuberculosis | 8 | 14 | 22 |
| Typhoid | 3 | 10 | 13 |
| Water pollution | 2 | -- | 2 |
| Miscellaneous | -- | 2 | 2 |
| | | | 164 |
| Fresno Branch Laboratory: | | | |
| Diphtheria | 32 | 20 | 52 |
| Tuberculosis | 3 | -- | 3 |
| Typhoid | -- | 1 | 1 |
| | | | 56 |
| Los Angeles Branch Laboratory: | | | |
| Diphtheria | 1 | 5 | 6 |
| Tuberculosis | 1 | -- | 1 |
| | | | 7 |
| Total number examinations | | | 227 |

### Report by Towns of the Number of Examinations Made in the State Hygienic Laboratory during December, 1910.

| Locality. | Diphtheria | Malaria | Tuberculosis | Typhoid | Water | Rabies | Miscellaneous. | Total |
|---|---|---|---|---|---|---|---|---|
| Auburn | | | | | | | | 12 |
| Dr. White | 12 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Bakersfield | | | | | | | | 2 |
| Dr. Brown | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Dr. McNamara | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Brentwood Park (West Gate P. O.) | | | | | | | | 1 |
| Dr. Van Renselard | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| Bay Point | | | | | | | | 1 |
| Dr. McKensie | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Berkeley | | | | | | | | 32 |
| Dr Bancroft | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Benton | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Brownsill | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Dr. Burnham | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Dr. Carpenter | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Dr. Ellis | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| Dr. Force | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Dr. McCleave | 0 | 0 | 1 | 1 | 0 | 0 | 0 | |
| Dr. Page | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Reinhardt | 1 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Dr. Rowell | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Sawyer | 6 | 0 | 3 | 1 | 0 | 0 | 0 | |
| Dr. Sampson | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Dr. Snook | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Stitt | 0 | 0 | 3 | 0 | 0 | 0 | 0 | |
| Chico | | | | | | | | 8 |
| Dr. Browning | 1 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Dr. Hamilton | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Landis | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Moulton | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Chino | | | | | | | | 1 |
| Dr. Savage | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| Clovis | | | | | | | | 6 |
| Dr. Ingram | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Maupin | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Colfax | | | | | | | | 9 |
| Dr. Peers | 9 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Colusa | | | | | | | | 4 |
| Dr. Lockwood | 0 | 0 | 2 | 1 | 0 | 0 | 0 | |
| Dr. Poage | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Corning | | | | | | | | 1 |
| Dr. Maggard | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| East Auburn | | | | | | | | 9 |
| Dr. Fay | 7 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Snypp | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Elk Grove | | | | | | | | 1 |
| Dr. Wildanger | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Emeryville | | | | | | | | 1 |
| Dr. Drennan | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Fresno | | | | | | | | 46 |
| Dr. Aiken | 1 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Dr. Burks | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Doyle | 15 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Ingram | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Kjaerbye | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Long | 17 | 0 | 2 | 0 | 0 | 0 | 0 | |
| Dr. Manson | 1 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Dr. Trowbridge | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Half Moon Bay | | | | | | | | 5 |
| Dr. Brooke | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hanford | | | | | | | | 5 |
| Dr. Rosson | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Haywards | | | | | | | | 4 |
| Dr. Billingsley | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Nielsen | 0 | 0 | 2 | 0 | 0 | 0 | 0 | |

**Report of the State Hygienic Laboratory for December, 1910**—*Continued.*

| Locality. | Diphtheria | Malaria | Tuberculosis | Typhoid | Water | Rabies | Miscellaneous. | Total |
|---|---|---|---|---|---|---|---|---|
| Kerman | | | | | | | | 1 |
| Dr. Hart | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Marysville | | | | | | | | 4 |
| Dr. Powell | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Maxwell | | | | | | | | 22 |
| Dr. Desrosier | 22 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Nevada City | | | | | | | | 1 |
| Dr. Tickell | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Oakland | | | | | | | | 2 |
| Dr. Von Adelung | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Dr. Werner | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Oroville | | | | | | | | 1 |
| Dr. Wilson | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Petaluma | | | | | | | | 3 |
| Dr. McMullin | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Rodehaven | 0 | 0 | 0 | 0 | 2 | 0 | 0 | |
| Pomona | | | | | | | | 1 |
| Dr. Wallace | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Porterville | | | | | | | | 2 |
| Dr. Barber | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Richmond | | | | | | | | 2 |
| Dr. Lucas | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sacramento | | | | | | | | 1 |
| Dr. Simmons | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| San Jose | | | | | | | | 7 |
| Dr. Cothran | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Simpson | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Dr. Wayland | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| San Mateo | | | | | | | | 6 |
| Dr. Hall | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Santa Cruz | | | | | | | | 1 |
| Dr. Philbrook | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Stockton | | | | | | | | 6 |
| Dr. Clarke | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Gibbons | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Hull | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Young | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sunnyvale | | | | | | | | 1 |
| Dr. Barnes | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Vallejo | | | | | | | | 3 |
| Dr. Bond | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dr. Reilly | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Woodbridge | | | | | | | | 6 |
| Dr. Arthur | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Woodland | | | | | | | | 1 |
| Dr. Blevins | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Willows | | | | | | | | 1 |
| Dr. Randolph | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Total | | | | | | | | 227 |

# REPORT OF BUREAU OF EPIDEMIOLOGY.

DR. WILLIAM F. SNOW, Director.

The morbidity returns for December are printed below. The deaths, which are recorded in parallel columns, provide an index to the incompleteness of the returns.

The following extract from a letter written by Health Officer Hubert O. Jenkins of Palo Alto is of interest. The State Board of Health now has ample authority to require such reports, but has no funds or clerical force with which to make such regulations effective. It is hoped that the present legislature will provide for this important work, and practical letters of this type from local health officials and from laymen are welcomed by the Board:

DEPARTMENT OF PUBLIC HEALTH AND SAFETY.

PALO ALTO, CAL., February 14, 1911.

*Dr. W. F. Snow.*

DEAR DR. SNOW: I am hoping to see you at Palo Alto before so very long, but am writing now to suggest a point that I have had in mind for some time.

"Would it be possible for you to require weekly reports of contagious diseases from the local health officers and then to send immediately a summarized report of diseases for all the State to the several health officers in return? This scheme would allow us to know what is going on in the State in very recent times, and we (as local health officers) could keep our State pin maps not very far out of date and could to a certain degree watch and guard against the approach of an epidemic.

"At present your morbidity monthly reports are far enough out of date to be little helpful though very interesting as a study.

"Also it would be necessary to know the number of cases existing (and not released from quarantine) for each week rather than the number of cases reported. (Thus we could tell when to take the pins out and clear up that section of the map.) It seems that this information could be asked for say on a postal card blank form, with another form for no contagious diseases as a check against neglect in reporting. *It could be no great trouble for the health officer and if made a law could be fairly well enforced by requiring that some report be sent in every week.* The health officer might miss some cases but he could be held to the making of some kind of a report every week.

"At present I make a practice of calling up health officers in the neighboring communities and asking about cases but of course telephone rates prohibit me from going very far."

## Morbidity Statistics for December, 1910.

| County. | Anterior Poliomyelitis. | | Typhoid Fever. | | Measles. | | Scarlet Fever. | | Whooping Cough. | | Diphtheria. | | Malarial Fever. | | Small pox |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. |
| Alameda— | | | | | | | | | | | | | | | |
| Alameda City | | | | | | | | | | 1 | | | | | |
| Berkeley | | | 2 | | | | 5 | | 1 | | 3 | | | | |
| Oakland* | | | 9 | 1 | | 1 | 6 | | | | 11 | 2 | | | *1 |
| Livermore | | | | | | | 3 | | | | | | | | |
| San Leandro | | | | | | | 3 | | | | | 1 | | | |
| Rural | | | | 3 | | | | | | | | | | | |
| Alpine | | | | | | | | | | | | | | | |
| Amador | | | | | | | | | | | | | | | |
| Rural | | | | | | | | | | | | | | 1 | |
| Butte— | | | | | | | | | | | | | | | |
| Biggs | | | | | | | 2 | | | | | | | | |
| Rural | | | | | | | | | | | | | | 1 | |
| Calaveras— | | | | | | | | | | | | | | | |
| Angels Camp | | | | | | | 1 | | | | | | | | |
| Colusa— | | | | | | | | | | | | | | | |
| Colusa | | | 1 | 1 | 8 | | | | | | | | | | |
| Maxwell | | | | | 1 | | | | | | 4 | | | | |
| Williams | | | | | 1 | | | | 3 | | | | | | |
| Rural | | | | | | | | | | 1 | | | | | |
| Contra Costa— | | | | | | | | | | | | | | | |
| Byron | | | | | 1 | | | | 3 | | 1 | | 1 | | |
| Richmond | | | | | | | 1 | | | | | | | | |
| Pinole | | | | | | | | | 2 | | | | | | |
| Danville | | | | | | | | | 2 | | | | | | |
| Martinez | | | | | | | | | | | | | 1 | | |
| Port Costa | | | | | | | | | | | | | 12 | | |
| Del Norte | | | | | | | | | | | | | | | |
| El Dorado | | | | | | | | | | | | | | | |
| Fresno— | | | | | | | | | | | | | | | |
| Fresno City | | | | | 5 | | 1 | | | | 20 | 1 | | | |
| Coalinga | | | 8 | 2 | | | | | | | 2 | | | | |
| Selma | | | 4 | | | | | | | | | | | | |
| Rural | | | 1 | 3 | | | 8 | | | | 11 | 4 | | | |
| Glenn | | | | | | | | | | | | | | | |
| Humboldt— | | | | | | | | | | | | | | | |
| Eureka | | | | | 4 | | 5 | 1 | | | | | | | |
| Imperial— | | | | | | | | | | | | | | | |
| El Centro | | | 2 | | | | | | | | | | | | |
| Imperial | | | | | | | | | | | 2 | | | | |
| Rural* | | | | | | | | | | | 1 | | | 1 | *1 |
| Inyo | | | | | | | | | | | | | | | |
| Kern— | | | | | | | | | | | | | | | |
| Bakersfield | | | | 1 | | | | | | | | | | 1 | |
| Taft* | | | | | | | | | | | | | | | *1 |
| Kings— | | | | | | | | | | | | | | | |
| Lemoore | | | | 1 | | | | | | | | | | | |
| Hanford | | | | | | | | | | | | | | 1 | |
| Rural | | | | | | | | | | | | | | 1 | |
| Lake— | | | | | | | | | | | | | | | |
| Kelseyville | | | | | 13 | | | | | | | | | | |
| Rural | | | | | | 1 | | | | | | | | | |
| Lassen | | | | | | | | | | | | | | | |
| Los Angeles— | | | | | | | | | | | | | | | |
| Los Angeles City* | | 1 | 19 | 5 | 17 | | 78 | 3 | 8 | | 30 | 3 | | | *1 |
| Alhambra | | | | | | | 2 | 1 | | | | | | | |
| Pasadena | | | 1 | | 4 | | 2 | | | | 16 | | | | |
| Pomona | | | | | | | 6 | 1 | | | 1 | | | | |
| Santa Monica | | | | | | | 5 | | | | | | | | |
| Lordsburg | | | | | | | | | | | 2 | | | | |
| Redondo Beach | | | | | | | | | | 1 | | | | | |
| South Pasadena | | | | | | | | | | 1 | | 1 | | | |
| Rural | 2 | | 1 | 1 | | | 29 | | | | 10 | 3 | | | |
| Madera— | | | | | | | | | | | | | | | |
| Rural | | | | 1 | | | | | | | | | | | |
| Marin— | | | | | | | | | | | | | | | |
| Rural | | | | | 28 | | 5 | | | | | | | | |
| Mariposa | | | | | | | | | | | | | | | |
| Mendocino— | | | | | | | | | | | | | | | |
| Fort Bragg | | | | | | | | | | | | 1 | | | |
| Rural | | | | 1 | | | | | | | 2 | 1 | | | |

### Morbidity Statistics for December, 1910—*Continued.*

| County. | Anterior Poliomyelitis. |  | Typhoid Fever. |  | Measles. |  | Scarlet Fever. |  | Whooping Cough. |  | Diphtheria. |  | Malarial Fever. |  | Small pox. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. | Deaths.... | Cases Reported.. |
| Merced— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Merced City |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Modoc |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mono |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Monterey— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soledad | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salinas |  |  |  |  |  |  | 2 |  |  | 1 |  |  |  |  |  |
| Rural |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Napa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada City |  |  |  |  |  |  |  |  | 15 |  |  |  | 1 |  |  |
| Grass Valley |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |
| Orange— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anaheim |  |  | 4 |  |  |  |  |  |  |  | 3 |  |  |  |  |
| Santa Ana |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Placer— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Newcastle |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |
| Auburn |  |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |
| Plumas— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  | 1 | 1 |  |  |  |  | 12 | 1 |  |  |  |  |  |
| Riverside— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corona |  |  | 3 |  |  |  |  |  |  |  | 2 | 1 |  |  |  |
| Elsinore |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  | 4 | 1 | 3 |  | 1 |  | 2 |  | 1 |  |  |  |  |
| Riverside City |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Sacramento— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sacramento City |  | 1 | 5 | 1 |  |  | 2 |  |  |  | 7 |  |  |  |  |
| Rural |  |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |
| San Benito |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| San Bernardino— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colton |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Ontario |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |
| San Bernardino |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| San Diego— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| San Diego City |  |  | 2 |  | 1 | 1 | 22 | 1 |  |  | 1 |  |  |  |  |
| Rural |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  | *15 |
| Fallbrook* |  |  |  |  |  |  |  |  |  |  |  |  |  |  | *4 |
| San Francisco* | 1 |  | 45 | 2 | 74 |  | 43 | 2 | 15 | 1 | 32 | 2 | 4 | 1 |  |
| San Joaquin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lodi |  |  |  |  | 2 |  |  |  | 15 | 1 |  |  |  |  |  |
| Rural |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | *2 |
| Stockton |  |  |  |  |  |  | 2 |  |  |  | 1 |  |  |  |  |
| San Luis Obispo— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Paso Robles |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Rural |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| San Mateo— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S. San Francisco |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |  |  | 11 |  |  |  |  |
| Santa Barbara— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S. Barbara City |  |  | 1 | 2 | 2 |  | 3 |  |  |  | 2 | 1 |  |  |  |
| Santa Clara— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| San Jose |  |  |  |  |  |  | 4 |  |  |  | 3 |  |  |  |  |
| Palo Alto |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Rural |  | 1 | 1 | 1 |  |  | 7 |  |  |  |  |  |  |  |  |
| Santa Cruz— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Santa Cruz City |  | 1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |
| Watsonville |  |  |  |  |  |  |  |  |  |  | 7 |  |  |  |  |
| Shasta— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Redding |  |  |  |  |  |  | 3 |  |  |  | 3 | 1 |  | 1 |  |
| Rural |  |  |  | 1 |  |  | 3 |  |  |  | 1 |  |  |  | *2 |
| Sierra |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Siskiyou— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dunsmuir |  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |
| Solano— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vallejo |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Rural |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Sonoma— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Santa Rosa |  |  |  | 2 | 4 |  |  |  |  |  |  |  |  |  |  |
| Rural |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stanislaus— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Modesto |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  |
| Turlock |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |
| Oakdale |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| Rural |  | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Sutter |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Morbidity Statistics for December, 1910**—*Continued.*

| County. | Anterior Poliomyelitis. | | Typhoid Fever. | | Measles. | | Scarlet Fever. | | Whooping Cough. | | Diphtheria. | | Malarial Fever. | | Small pox. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases Reported | Deaths | Cases Reported | Deaths | Cases Reported | Deaths | Cases Reported | Deaths | Cases Reported | Deaths | Cases Reported | Deaths | Cases Reported | Deaths | Cases Reported |
| Tehama— | | | | | | | | | | | | | | | |
| Red Bluff | | | | | | | | | | | | | | 1 | |
| Trinity | | | | | | | | | | | | | | | |
| Tulare— | | | | | | | | | | | | | | | |
| Lindsay | | | 6 | | | | 4 | | | | | | | | |
| Visalia | | 1 | | | | | | | | | | | | | |
| Tuolumne— | | | | | | | | | | | | | | | |
| Rural | | | | 2 | | | | | | | | | | | |
| Ventura— | | | | | | | | | | | | | | | |
| Rural | | | | | | | | | | | 1 | | | | |
| Santa Paula | | | | 1 | | | | | | | | | | | |
| Yolo— | | | | | | | | | | | | | | | |
| Davis | 1 | | | | | | 2 | | | | | | | | |
| Yuba— | | | | | | | | | | | | | | | |
| Marysville | | | | | 2 | | | | | | 5 | 1 | | | |
| Totals | 7 | 10 | 128 | 43 | 171 | 4 | 265 | 9 | 80 | 10 | 210 | 26 | 22 | 10 | 27 |

# THE CALIFORNIA PUBLIC HEALTH LEAGUE.

## OFFICERS.

| | |
|---|---|
| President,<br>Mr. A. Bonnheim---------Sacramento | Second Vice-President.<br>Miss Elizabeth H. Ashe--San Francisco |
| First Vice-President,<br>Dr. F. C. E. Mattison-------Pasadena | Third Vice-President,<br>Dr. George H. Aiken----------Fresno |

Secretary-Treasurer, Dr. W. F. Snow, Sacramento.

**"The object of this organization shall be the co-ordination of effort and the promotion of economy and harmony among all public health organizations and agencies in California."**

Whereas, This Association recognizes the great natural advantages of California for the development of high standards of physical efficiency and healthful environment, and

Whereas, California in common with other states permits much needless illness and loss of life because of inadequate organization and funds for health protection; and

Whereas, Health conservation rightly demands its place among the progressive conservation policies of the commonwealth; therefore, be it

*Resolved,* That this Association recommends to the careful consideration of the citizens, the legislators, and the Governor of California, all practical measures for health conservation which may be advanced during the 1911 session of the legislature.

**Names of officers and information concerning associations, which are members of the League, will be sent on application to the Secretary of the State Board of Health.**

# LIST OF COUNTY HEALTH OFFICERS.

| *County.* | *Health Officer.* | *Address.* |
|---|---|---|
| Alameda | Dr. C. L. McKown | Niles |
| Alpine* | County Recorder Frank Smith | Markleeville |
| Amador | Dr. E. E. Endicott | Jackson |
| Butte | Dr. L. Q. Thompson | Gridley |
| Calaveras | Dr. E. W. Weirich | Angels Camp |
| Colusa | Dr. C. A. Poage | Colusa |
| Contra Costa | Dr. F. S. Gregory | Black Diamond |
| Del Norte* | County Recorder N. G. McVay | Crescent City |
| El Dorado | Dr. S. H. Rantz | Placerville |
| Fresno | Dr. W. T. Burks | Fresno |
| Glenn | Dr. J. A. Randolph | Willows |
| Humboldt | Dr. E. H. Bryan | Eureka |
| Imperial | Dr. Virgil McCoombs | Imperial |
| Inyo | Dr. I. J. Woodin | Independence |
| Kern | Dr. G. M. Bumgarner | Bakersfield |
| Kings | Dr. Ralph Motherol | Hanford |
| Lake | Dr. W. E. Upton | Kelseyville |
| Lassen | Dr. D. E. Mason | Bieber |
| Los Angeles | Dr. F. O. Sawyer | Los Angeles |
| Madera | Dr. Mary R. Butin | Madera |
| Marin | Dr. J. H. Kuser | San Rafael |
| Mariposa | Dr. F. L. Wright | Mariposa |
| Mendocino | Dr. J. Liftchild | Ukiah |
| Merced | Dr. C. H. Castle | Merced |
| Modoc | Dr. John Stile | Alturas |
| Mono* | County Recorder Geo. Delury | Bridgeport |
| Monterey | Dr. Garth Parker | Salinas |
| Napa | Dr. Adolph J. Kahn (County Physician) | Napa |
| Nevada | Dr. Carl P. Jones | Grass Valley |
| Orange | Dr. C. D. Ball | Santa Ana |
| Placer | Dr. G. H. Fay | Auburn |
| Plumas | Dr. F. D. Walsh | Quincy |
| Riverside | Dr. George E. Tucker | Riverside |
| Sacramento | Dr. Hugh Beattie | Elk Grove |
| San Benito | Dr. R. G. Curtis | Hollister |
| San Bernardino | Dr. D. C. Strong | San Bernardino |
| San Diego | Dr. Nathan Hunt | San Diego |
| San Francisco | Dr. W. F. McNutt, Jr. | San Francisco |
| San Joaquin | Dr. Wm. Friedberger | Stockton |
| San Luis Obispo | Dr. H. M. Cox | San Luis Obispo |
| San Mateo | Dr. W. G. Beattie | Colma |
| Santa Barbara | Dr. J. C. Bainbridge | Santa Barbara |
| Santa Clara | Dr. Wm. Simpson | San Jose |
| Santa Cruz | Dr. W. R. Congdon | Santa Cruz |
| Shasta | Dr. F. Stabel | Redding |
| Sierra | Dr. R. B. Davey | Downieville |
| Siskiyou | Dr. F. J. McNulty (County Physician) | Yreka |
| Solano | Dr. S. G. Bransford | Suisun |
| Sonoma | Dr. S. S. Bogle | Santa Rosa |
| Stanislaus | Dr. F. R. De Lappe | Modesto |
| Sutter | Dr. J. McFadyen | Yuba City |
| Tehama | Dr. J. S. Cameron | Red Bluff |
| Trinity | Dr. D. B. Fields | Weaverville |
| Tulare | Dr. M. E. Pettit | Visalia |
| Tuolumne | Dr. C. E. Congdon | Jamestown |
| Ventura | Dr. A. A. Maulhardt | Oxnard |
| Yolo | Dr. W. J. Blevins | Woodland |
| Yuba | Dr. J. H. Barr | Marysville |

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*This county has not been able to arrange with any physician to serve as county health officer.

# PARTIAL LIST OF CITY HEALTH OFFICERS.

| | |
|---|---|
| Alameda | Dr. L. W. Stidham |
| Alhambra | Dr. F. E. Corey |
| Alturas | Dr. John Stile |
| Anaheim | Dr. J. L. Beebe |
| Anderson | Dr. J. H. Soothill |
| Antioch | E. C. Worrill |
| Auburn | Dr. R. F. Rooney |
| Azusa | Dr. S. A. Ellis |
| Berkeley | Dr. J. J. Benton |
| Biggs | Dr. B. Caldwell |
| Black Diamond | Dr. F. S. Gregory |
| Bakersfield | Dr. G. M. Bumgarner |
| Chico | G. H. Taylor |
| Chino | Dr. P. M. Savage |
| Coalinga | Dr. H. C. Warren |
| Colton | Dr. J. A. Champion |
| Colusa | Dr. W. T. Rathbun |
| Corona | W. H. Chapman |
| Coronado | Dr. Raffaele Lorini |
| Cottonwood | Dr. A. B. Gilliand |
| Davis | Dr. W. E. Bates |
| Doris | Dr. A. A. Atkinson |
| Dixon | Dr. R. L. Rierson |
| Dunsmuir | Dr. E. J. Cornish |
| East San Jose | Dr. W. A. Low |
| Elsinore | Dr. Hugh Walker |
| Escondido | Dr. David Crise |
| Etna | Dr. W. H. Haines |
| Eureka | Dr. W. L. Perrott |
| Fairfield | Dr. S. G. Bransford |
| Ferndale | Dr. L. Michael |
| Fort Bragg | Dr. L. C. Gregory |
| Fort Jones | Thos. Bransom |
| Fresno | Dr. Geo. H. Aiken |
| Gilroy | Dr. Jonas Clark |
| Glendale | R. E. Chase |
| Grass Valley | Dr. C. P. Jones |
| Gridley | Dr. L. L. Thompson |
| Hayward | Dr. F. W. Browning |
| Healdsburg | Dr. O. C. Hueb |
| Hermosa Beach | H. Vetter |
| Hollywood | E. O. Palmer |
| Huntington Park | Dr. W. Thompson |
| Kernville | Mr. J. W. Sumner |
| Lakeport | Dr. Jabez Banks |
| Lincoln | Dr. G. W. Davis |
| Lindsay | Dr. Walter W. Tourtillott |
| Livermore | Dr. H. G. McGill |
| Lodi | Dr. F. W. Colman |
| Long Beach | Dr. W. H. Newman |
| Los Angeles | Dr. L. M. Powers |
| Los Gatos | Dr. Elenor S. Yelland |
| Madera | Dr. Mary R. Butin |
| Maricopa | Mr. Thad Cheeney |
| Martinez | Dr. E. E. Brown |
| McCloud | Dr. R. T. Legge |
| McKittrick | Mr. G. M. Chitwood |
| Merced | Dr. C. H. Castle |
| Mill Valley | Capt. M. Staples |
| Modesto | Dr. W. J. Wilhite |
| Mojave | Mr. A. Smith |
| Monrovia | Dr. R. D. Adams |
| Monterey | J. E. Freeman |
| Morgan Hill | Dr. D. W. Watt |
| Mountain View | Dr. Philo Hull |
| Napa | J. D. Treadway |
| National City | Dr. Theo. F. Johnson |
| Nevada City | Hugh Murchie |
| Oakland | Dr. E. N. Ewer |
| Ontario | Dr. C. S. Orr |
| Orange | Dr. F. L. Champline |
| Oroville | Dr. W. F. Gates |
| Oxnard | Dr. Ralph W. Avery |
| Pacific Grove | Dr. H. N. Yates |
| Palo Alto | Hubert O. Jenkins |
| Pasadena | Dr. Stanley P. Black |
| Petaluma | Dr. R. B. Duncan |
| Placerville | Mr. P. J. Hall |
| Pomona | Dr. T. J. Wilson |
| Piedmont | Geo. T. Burtchael |
| Randsburg | Mr. E. B. McGinnes |
| Redding | L. D. Poole |
| Redlands | Dr. J. M. Wheat |
| Redondo Beach | Dr. D. R. Hancock |
| Redwood | Dr. J. L. Ross |
| Richmond | Dr. Chas. R. Blake |
| Riverside | Dr. Thos. R. Griffith |
| Rocklin | Dr. S. P. Rugg |
| Sacramento | Dr. Wm. K. Lindsay |
| Salinas | S. A. McCollum |
| San Bernardino | Dr. J. G. Ham |
| San Diego | Dr. F. H. Mead |
| San Francisco | Dr. W. F. McNutt, Jr. |
| San Jose | Dr. H. C. Brown |
| San Jacinto | Charles Long |
| San Rafael | Dr. W. F. Jones |
| Santa Ana | Dr. J. I. Clark |
| Santa Barbara | Dr. D. A. Conrad |
| Santa Cruz | Dr. C. H. Anderson |
| Santa Monica | Dr. W. H. Parker |
| Santa Rosa | Dr. Jackson Temple, Jr. |
| Sisson | Dr. L. Gouzuet |
| South Pasadena | Dr. C. A. Whiting |
| Stockton | Dr. S. W. R. Langdon |
| Taft | Mr. J. W. Bursell |
| Tracy | Dr. J. G. Murrell |
| Turlock | Dr. E. L. Clough |
| Vacaville | Mr. A. P. Finan |
| Vallejo | Dr. F. T. Bond |
| Watsonville | Dr. F. H. Koepke |
| Woodland | W. D. Clary |
| Whittier | Dr. W. H. Stokes |
| Yreka | Dr. A. J. Collar |

THE CALIFORNIA STATE BOARD OF HEALTH BULLETIN WILL BE SENT FREE TO ANY CITIZEN OF THE STATE ON REQUEST.